

LEGISLATIVE BLUEPRINT

for Addressing Texas' Water Infrastructure Crisis

Prepared by

TEXAS ²⁰₃₆



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Acknowledgements

In 2022, Texas 2036, the Texas Water Foundation, and the Water Finance Exchange collaborated to host a series of stakeholder meetings to discuss the challenges facing Texas' water and wastewater infrastructure and the opportunities presented by the US Infrastructure Investment and Jobs Act. This policy blueprint prepared by Texas 2036 reflects some of the ideas and issues discussed at those meetings. The findings and recommendations presented here by Texas 2036 are based off portions of these discussions, they are not necessarily reflective of the interests of the individuals and organizations that participated in the stakeholder group meetings.

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Executive Summary

Texas' water and wastewater infrastructure is at a crisis point. Years of neglect, underinvestment, and an aging infrastructure have adversely affected the reliability, sustainability, and resilience for many of Texas' 10,000 plus water and wastewater systems. In 2022, these problems manifested in a thirteen day boil water notice in Laredo, Odessa residents living days without water, and countless boil water notices and water restrictions placed on small communities across Texas.

Despite heroic efforts by the Texas Water Development Board (TWDB) to address these issues, the liabilities associated with our aging, deteriorating, and sometimes broken water and wastewater infrastructure continue to grow. These liabilities are particularly acute within small, rural, and disadvantaged communities. Failing to address these problems risks endangering other state and local investments in economic development and community vitality, including those made in broadband, public education, and health care to name a few. If Texas, as a matter of policy, seeks to promote economic development across the state, then the condition of our depreciating water and wastewater infrastructure needs to be addressed.

Texas voters recognize the need for greater state investments in our water infrastructure. According to [Texas 2036's Texas Voter Poll](#) released in October 2022, 84% of voters support the Legislature's creation of a new fund to address the problems associated with our aging, depreciating water infrastructure. Even as a severe drought affected Texas for most of 2022, more Texans supported funding to fix broken water infrastructure (84%) than those who supported increased funding for water supply development (82%).

The US Infrastructure Investment and Jobs Act (IIJA) represents a starting point for addressing Texas' water infrastructure problems. Passed in late 2021, the bill course-corrects decades of declining federal spending on state infrastructure needs. Moreover, IIJA places a substantial emphasis on assisting small, rural, and disadvantaged communities – systems that have frequently fallen through the cracks. Texas will receive over \$2 billion in IIJA funds over the next five years.

Despite the significant funding opportunities made available through IIJA, the magnitude of Texas' water and wastewater infrastructure problems necessitate changes in the state's infrastructure assessment and financial strategy. Federal funding and programs cannot address these issues alone. The opportunity exists to develop a framework to assess the water access needs of water and wastewater utilities and allocate technical assistance and financial resources towards systems that are failing or at-risk of failing.

This water infrastructure blueprint offers a menu of recommendations for policymakers' consideration. These options seek to both maximize the state's leverage and deployment of IJA dollars while using this unprecedented federal funding opportunity as a catalyst for a new policy framework for addressing Texas' water infrastructure needs. Combined, these recommendations aim towards developing a statewide support structure and investment strategy to address the water infrastructure needs of many Texas communities.

Starting in the spring of 2022, Texas 2036, the Water Finance Exchange, and the Texas Water Foundation collaborated to host a series of discussions with a working group of state water leaders about the opportunities presented within IJA. The group included representatives from multiple sectors in Texas' water arena, including large, small, and rural municipalities, water districts and river authorities, industry trade groups, state agencies, environmental interests, technical assistance providers, and, among others, philanthropic organizations. Throughout these discussions a number of ideas were developed, and humbly presented here, for organizing public and private efforts relating to IJA implementation and developing a sustainable state policy for addressing water infrastructure needs. While these ideas or concepts were discussed within the group, or emerged in subsequent discussions, they are not necessarily representative of the interests of all organizations participating in the discussion.

The key elements of this blueprint include the following:

Financial Strategy: Establish a new fund or modify an existing fund to and TWDB revenue stream that addresses the problems associated with aging, deteriorating infrastructure. Consider identifying future revenue streams to support TWDB capacity in these efforts. Build on past TWDB successes, including the Economically Distressed Areas Program (EDAP), through the maximization of use of IJA funds with a focus on the water needs within small, rural, and disadvantaged communities.

Water Access Needs Planning: Develop a new assessment process that evaluates water access needs to identify utilities that are failing or at-risk of failing and using that data to guide and inform the strategic deployment of state resources.

Capacity Development: Systematically build and develop needed capacity for sustainable infrastructure development, including technical assistance outreach, workforce development, and economies scale through regional solutions.

Community Engagement: Encouraging the development of a technical assistance provider corps, deployment of private and philanthropic capital, and private-sector partnerships to broaden the array of providers addressing water access needs.

More detailed background and recommendations are set forth in this blueprint. Texas has a narrow, five-year window to deploy its IJIA allotment. Nonetheless, Texas has the talent, insight, and, in our broad view, the discretion under IJIA to take the initiative to craft and design policies responsive to our water access needs. More importantly, this is a catalytic opportunity to change state policy to address long standing water and wastewater infrastructure problems. As other states scramble to develop solutions with their IJIA funds, Texas can continue to serve as a national water policy leader by using IJIA as an opportunity to strengthen existing planning and financing frameworks. Drawing on the strength of our state agencies, local government leaders, and non-governmental organizations, Texas can create and implement the strategy needed to achieve meaningful results with IJIA dollars in the near-term while establishing a long-term, solution-oriented framework to address the problems associated with failing, deteriorating water and wastewater infrastructure.

Background & Findings

1. Texas’ aging, deteriorating water and wastewater infrastructure contributes to escalating water access needs.

Within the context of state and regional water planning processes water needs are commonly understood as those water supplies needed to address growing water demands. A separate, but sometimes related, category of water need are *water access needs*. These are communities that have aging, deteriorating water or wastewater systems and other systemic challenges to the delivery of consistent water and wastewater service. The table, *Water Access Needs Characteristics*, describes these challenges in greater detail.

Although Texas does not have a formal plan to assess or characterize statewide water access needs, there are three proxies that provide some level of description. The first is the subscription rate for the Intended Use Plans (IUP) for the state’s Clean and Drinking Water State Revolving Funds (SRFs). The current subscription rate for the SRFs as reflected in the total project cost for the state fiscal year 2023 [DWSRF](#) and [CWSRF](#) IUPs equals \$5.28 billion. Based on the input received during the stakeholder group meetings, however, the true cost of Texas’ water access needs is much higher. In particular, participants observed that many of Texas’ 7,108 public water systems and over 3,100 wastewater treatment operators, especially those in small, rural, or disadvantaged communities, are unaware of the funding opportunities available through the SRFs or TWDB. Consequently, these communities’ water access needs do not register within the aggregate amounts reported in the IUPs for the SRFs.

Texas Water Access Needs Characteristics

Aging, deteriorating water and wastewater systems

Lack of qualified water-related workforce

Significant levels of water loss

Limited local financial capacity for improvement

Strained household capacity to afford water and wastewater services

Non-compliance with state/federal regulations

Insufficient source water quality

Insufficient source water quantity

History of inadequate service

The second proxy assessment of Texas’ water access needs is the [American Society of Civil Engineers](#) (ASCE) annual infrastructure report card. ASCE’s 2021 report card rates Texas’ drinking water infrastructure with a C-. While ASCE rightfully credits TWDB’s water supply planning and financing efforts for addressing drinking water supply needs, the report points to an increase in boil water advisories between 2008 and 2015 as a potential indicator of aging

infrastructure. The report also notes that increasing rates of water loss, especially within small systems, are indicative of low operational maintenance. Further, state drinking water systems' susceptibility to extreme weather events, including droughts and hurricanes, remains an ongoing liability. Interestingly, while ASCE observes that limited data exists on a comprehensive state level regarding the ages of Texas' public water systems, symptomatic data point towards aging, deteriorating systems across the state.

While Texas' drinking water infrastructure earned a C-, wastewater infrastructure rates poorly with a D. This near-failing grade reflects the absence of resilience to extreme weather events and a decline in systems' condition due to their age. In addition, the documented increase in sanitary sewer overflows (SSOs) between 2016 and 2019, combined with an increased subscription for TWDB financial assistance point to systems in poor condition. ASCE's report card also notes that "data regarding the overall condition of wastewater treatment facilities and pipelines is not publicly available," suggesting that a significant data gap exists that preclude policymakers' understanding of the magnitude of this issue.

The third proxy assessment of Texas' water and wastewater infrastructure can be found within the Clean Watershed and Drinking Water Needs Surveys published by the US Environmental Protection Agency. The most recent [Drinking Water Needs Survey](#) published in 2015 assesses the cost of projects that may be needed to address existing infrastructure that is either deteriorated or undersized, ensure regulatory compliance, provide for system resilience, or improve energy efficiency or cost effectiveness. In 2015 the estimated cost to improve Texas' drinking water systems totaled \$45.2 billion over the next 20 years. This figure reflects the construction, engineering, materials, and installation costs associated with each project. Given the date of this survey, and the onset of inflationary pressures over the past two years, the current figure for fixing drinking water systems is likely much higher.

The other infrastructure needs survey, the Clean Watersheds Needs Survey, indicates billions in funding needs to ensure infrastructure compliance with the requirements of the US Clean Water Act. The most recent [Clean Watersheds Needs Survey](#) was completed ten years ago in 2012. While this data is dated, even then the estimated amount to fix Texas' wastewater infrastructure over the next 20 years totaled \$9.2 billion.

Separate from these proxy assessments of Texas' water access needs, anecdotal evidence points to [significant infrastructure repair needs in small, rural communities](#) and [continuing decay of water and wastewater systems](#). In 2022, these water access needs manifested in prolonged boil water notices in Laredo, a broken trunk line in Odessa, and water cutbacks in Bell County. (And beyond Texas, these issues culminated in the catastrophic water system failure in Jackson, Mississippi in August 2022.) [Another study](#) released in September 2022 by the Texas Living Waters Project and the National Wildlife Federation revealed that Texas water utilities lose

at least 572,000 acre feet of water per year. As noted in the report, this is the equivalent of the combined water needs for the cities of Austin, Fort Worth, El Paso, Laredo, and Lubbock. The amount of water lost also equates with the storage capacity of a large surface reservoir. In addition, a [recent survey of state water utilities by Texas + Water](#) found that 69% of respondents felt that water infrastructure is not being adequately prioritized as an essential means of ensuring public health, safety, and economic development.

Lastly, recent polling indicates that Texans are aware of the growing liabilities associated with aging, deteriorating water infrastructure. Texas 2036's Texas Voter Poll released in October 2022 revealed that 84% of voters favor creating a new state fund to address aging infrastructure problems. In fact, slightly more voters favored funding for fixing aging infrastructure (84%) than those supporting funding for water supply projects (82%) - even as the state endured withering drought conditions throughout 2022.

While these proxy data point to substantive challenges for Texas' water and wastewater infrastructure, the state lacks an assessment mechanism that identifies utilities that are failing or at-risk of failing. The State Water Plan and regional water plans do not fully contemplate statewide water access needs; and, to be fair, they are not required by law to do so. In fact, the [2022 State Water Plan](#) acknowledges that, with the limited exception of some water conservation strategies, its overall capital costs do not reflect those of replacing aging infrastructure (SWP, page 134). Developing a water access needs assessment that identifies utilities that are failing or at-risk of failing would inform the strategic allocation of technical assistance and financial resources towards fixing the long-term liabilities associated with our aging, deteriorating water and wastewater infrastructure.

2. IIJA provides Texas with a catalytic opportunity to address communities' water access needs, particularly within small, rural, and disadvantaged communities.

In late 2021 Congress approved the [US Infrastructure Investment and Jobs Act \(IIJA\)](#), also known as the Bipartisan Infrastructure Law or IIJA. IIJA provides states with unprecedented levels of funding to fix real problems with water and wastewater infrastructure. The particulars of the Act provide substantial allotments for lead service line (LSL) replacement, PFAS/PFOA and emerging contaminant removal, and supplemental base funding for the state Clean and Drinking Water State Revolving Funds (SRFs). In addition to these objectives, both IIJA and the Environmental Protection Agency (EPA) emphasize the provision of assistance to small, rural, and disadvantaged communities, expanding the development and utilization of technical assistance, and, among other objectives, promoting regional solutions in the deployment of IIJA funds. The EPA also encourages the use of IIJA dollars to improve water utilities' resilience to extreme weather events and cyberattacks.

Texas will receive approximately \$2.5 billion to address water and wastewater infrastructure needs through IJJA. For perspective, this amount is greater than the state’s historic investment of \$2 billion to capitalize the State Water Implementation Fund for Texas (SWIFT) in 2013. The bill gives states a five year window to spend their allotted funds. The table below, *Texas’ IJJA SRF Allocations*, describes the funds that Texas will receive for each program established or funded under IJJA.

Texas’ IJJA SRF Allocations				
Program	Purpose	State Matching Requirement	Per FY (estimated)	Total (5 years)
CWSRF - Base	Wastewater treatment, nonpoint source pollution management, stormwater management, water reuse, energy efficiency.	10% for FY 22-23, 20% FY 24-26	\$81,347,000*	\$406,735,000
CWSRF - Emerging Contaminants	Address emerging contaminants.	None.	\$4,000,000**	\$20,000,000
DWSRF - Base	Drinking water infrastructure projects.	10% for FY 22-23, 20% FY 24-26	\$140,993,000*	\$704,965,000
DWSRF - LSL replacement	Lead service line (LSL) replacement projects and associated activities directly connected to identification, planning, design, and replacement of LSLs.	None.	\$222,000,000* *	\$1,110,000,000
DWSRF - Emerging Contaminants	Address emerging contaminants in drinking water with a focus on PFAS.	None.	\$59,000,000**	\$295,000,000
Total Texas Allotment Over 5 Years:			\$2,536,700,000	

Sources: * DWSRF & CWSRF FY 23 IUPs; ** TWDB presentation from May 31, 2022 Stakeholder Group Meeting.

The EPA has routinely emphasized and encouraged states’ primacy and innovation in pursuing IJJA implementation. [Federal guidance](#) frequently points to state flexibility in tailoring programs to meet local water needs, including local water quality and public health challenges. Towards this end, Texas has significant latitude to develop policy priorities, financial assistance structures, and, among other items, technical assistance and outreach programs to address local water needs.

IIJA offers a unique opportunity to address small, rural, and disadvantaged communities with significant water access needs.

Stakeholder discussions frequently noted that many of Texas’ small, rural, and disadvantaged communities have substantive water access needs that remain unaddressed. The reasons for these deficiencies vary. Many communities are simply unaware of the water infrastructure funding opportunities available through the state. A large majority of communities are serviced by small water utilities that lack the personnel or technical guidance needed to pursue fixes to their systems. Some communities may lack the audits, financial statements, or other information needed to apply for financial assistance. Others lack the financial capacity to fix their systems: loans, even at low interest rates, may be too cost prohibitive given the rate sensitivity of their oftentimes small and low-income customer base. In these instances grants, or even forgivable loans, would work to address long standing water access needs.

The IIJA offers unprecedented levels of financial assistance for disadvantaged communities. Specifically, the bill requires that significant portions of program funds be applied as grants or forgivable loans to small, rural, or disadvantaged communities. The table below, *IIJA Grant & Forgivable Loan Requirements*, describes these requirements for each SRF program.

IIJA Grant & Forgivable Loan Requirements			
Program	Proportions for Grants & Forgivable Loans	Grant & Forgivable Loan Eligibility	Texas Grant & Forgivable Loan Availability, Per FY
CWSRF - Base	49%	Qualified cities; entities implementing water or energy efficiency goals, mitigating stormwater runoff, or engaging in sustainable planning, design, and construction.	\$52,900,000
CWSRF - Emerging Contaminants	100%	Disadvantaged Communities	\$4,000,000
DWSRF - Base	49%	Disadvantaged Communities	\$86,500,000
DWSRF - LSL replacement	49%	Disadvantaged Communities	\$109,000,000
DWSRF - Emerging Contaminants	25%	Disadvantaged Communities or PWS serving fewer than 25,000 people.	\$47,000,000

The level of subsidy offered by IIJA for small, rural, and disadvantaged communities could have a material impact on these communities’ decisions to participate in the SRF programs.

The substantial portion of IJA funds made available for grants and forgivable loans would address some communities' water access needs (principally compliance with state and federal health, safety, and environmental compliance requirements) and incentivize greater participation in the SRFs. This represents a significant economic development opportunity for Texas. Healthy, reliable, resilient, and affordable water systems are essential for continued economic growth and development across Texas. Moreover, the success of other critical state infrastructure and economic development programs, including those relating to broadband, workforce, energy development, health care, and public education, ultimately hinge on the operation of healthy water systems.

IJA provides Texas with an opportunity to reshape state water policy towards addressing longstanding water and wastewater infrastructure problems. This includes targeted planning and outreach for Texas' small, rural, and disadvantaged communities, enhanced development and utilization of technical assistance, and an emphasis on regional solutions. This approach necessitates a new direction for state planning, outreach, and project development and builds on the strengths and expertise of our state agencies, including TWDB, and Texas' water stakeholder community. If Texas is to take advantage of the significant opportunity offered by IJA to fix substantive water infrastructure problems, then state leaders must act quickly. IJA provides a five year funding window for states to spend their respective allocations. The clock began ticking for Texas to take action since the IJA was approved in November 2021. Texas must act in 2023, especially during the 88th Regular Session of the Texas Legislature to address programmatic changes, if it intends to maximize its use of IJA dollars to address water infrastructure problems. Moreover, state agencies need more resources to pursue this opportunity in its entirety. Being opportunistic here not only calls for state leadership but also for the contribution of multiple organizations and leaders in the State.

3. Technical assistance providers are best positioned to tailor responsive solutions, especially for small, rural, and disadvantaged communities.

Technical assistance involves the provision of financial, managerial, regulatory, engineering, and operational support to water utilities. Technical assistance is often provided through third party providers, such as Communities Unlimited in Texas, the Texas Rural Water Association, or the Florida Government Utility Authority (FGUA) in Florida, and oftentimes serves as a key bridging mechanism between state financial assistance programs and communities with significant water access needs. In practical terms, technical assistant providers serve as critical "boots on the ground," working closely with communities to identify their water access needs and develop responsible solutions.

Technical assistance providers also have the capacity to perform needed outreach to communities with significant water access needs. The Sunset Advisory Commission adopted [several Sunset](#)

[staff management action recommendations](#) to hone and improve TWDB’s outreach to entities eligible for state financial assistance. While these recommendations will abet TWDB’s already commendable efforts at community outreach, which include the Asset Management Program for Small Systems (AMPSS) and the “CFO to Go” initiative, the agency’s staffing resources will limit their ultimate reach. Further, and as discussed during the stakeholder group meetings, some communities may be reluctant to engage directly with a state agency to obtain financial assistance.

Given these potential limitations, technical assistance providers offer the opportunity to provide broader, region-specific outreach to communities with significant water access needs. The stakeholder discussion frequently centered on how technical assistance providers and funding are key to approaching and engaging communities that have not participated in state financial assistance programs, including the SRFs.

Ultimately, Texas needs to expand its technical assistance provider corps. There are currently a limited number of organizations providing technical assistance to eligible communities. In addition to these organizations, the [Texas Water Infrastructure Coordination Committee \(TWICC\)](#) works to coordinate the activities of these providers on a volunteer basis. But for the voluntary work of the TWICC, Texas has no formal framework for coordinating or developing its technical assistance corps.

Expanding Texas’ technical assistance provider corps is essential for providing assistance to many communities with water access needs, particularly small, rural, and disadvantaged communities. In particular, technical assistance providers may:

- Develop and recommend holistic approaches for sustainable solutions, including nature-based and OneWater projects.
- Engage with units of local government, including Texas counties and councils of government, to identify water utilities with water access needs.
- Structure regional solutions for water or wastewater infrastructure or service delivery following a model similar to FGUA.
- Guide communities towards developing baseline financial documents, including audited financials and cash flow models.
- Better identify communities with lead service line inventories that would be eligible for IJA DWSRF funds for lead service line replacement.
- Better identify communities with PFAS/PFOA or emerging contaminants that would be eligible for IJA SRF emerging contaminant funds.
- Provide honest broker counsel and objective information to local decision makers regarding the sustainability of existing systems and viable alternatives.

The IIJA authorizes states to allocate up to 2% of their CWSRF capitalization grant for technical assistance provided by nonprofits, or state, municipal, interstate, or regional entities. Here, both the IIJA and EPA recognize the critical role that technical assistance serves in addressing some communities' needs. Just as this funding set-aside provides an opportunity to expand Texas' technical assistance provider corps, both the state legislature and philanthropic foundations can play integral roles as well. In particular, state law could be amended to authorize state financial assistance programs to fund technical assistance providers and outreach. Further, philanthropic foundations could develop a state technical assistance provider incubator to expand the number of entities and qualified individuals capable of providing outreach and technical assistance to communities.

4. Regionalization and regional solutions represent a pathway towards sustainable water and wastewater management.

Water and wastewater infrastructure development in Texas can be enhanced through regional strategies that offer economies of scale and solutions responsive to the financial and operational challenges faced by many water utilities. The [EPA's guidance for IIJA implementation](#) notes that “[r]egionalization, partnerships, and/or non-physical consolidation may be the best option for some systems.” Towards that end, EPA's guidance encourages states to leverage IIJA funds to promote regional solutions. This represents a unique opportunity to advance the policy of regionalization, or regional solutions, adopted by the Texas Legislature within the Texas Water Code. State law routinely prioritizes regional solutions as a preferred policy outcome. For example, applicants for a water or wastewater certificate of convenience and necessity (CCN) must demonstrate to the Public Utility Commission that regionalization with another utility is not economically feasible ([§13.241, Water Code](#)). State policy regarding the financing of water infrastructure projects includes the specific finding that it is in the public interest and to the benefit of the general public of the state to encourage and to assist in the planning and construction of projects to provide for regionalization, among other objectives ([§15.002, Water Code](#)). And, as another example, Texas' water quality policy includes a specific statement encouraging and promoting the development of regional wastewater treatment systems ([§26.003, Water Code](#)). Lastly, the Legislature directed TWDB to give significant consideration when evaluating applications for State Water Implementation Fund for Texas (SWIFT) to those that provide regionalization ([§15.437\(c\)\(3\), Water Code](#)).

Despite the Legislature's articulation of regionalization as a preferred policy objective, regional solutions are rarely developed in Texas. The stakeholder group discussed how many communities, particularly small, rural, and disadvantaged communities prioritize local control over their water systems. The reasons for insistence on local control vary, and may relate to concerns over ownership, service delivery, rate setting, or even regional rivalries. Nonetheless regionalization, or regional solutions, offers an avenue to provide efficient service delivery,

implement cost-effective rate structures, expand capacity, deploy innovative technologies, address qualified workforce needs, and scale projects with local water supplies.

The [Florida Government Utilities Authority](#) (FGUA) provides an instructive example of how regional solutions can be developed and deployed to address communities' interests. Authorized by Florida Statutes, FGUA operates as a special purpose government for water utility improvement, operation, management, and ownership for multiple jurisdictions. The Authority operates 70 systems across 15 counties through interlocal agreements. A majority of the systems participating in FGUA are small, rural, disadvantaged entities with neglected infrastructure and workforce challenges. FGUA has a \$100 million operating budget, a \$165 million 5-year capital improvement plan. The Authority is governed by a local government appointed board in order to ensure representation from all participating systems and to provide local control over services and projects. FGUA's operations achieve economies of scale with regard to service delivery, project development, and financing that benefit systems participating within this regional solution. These benefits include water system reliability with no additional rate impacts to the customer base.

Another example of innovative regional solutions includes the EJ Water Cooperative in Illinois. Founded as a non-profit cooperative in the early 1990's, EJ Water provides water services to cities and communities throughout central Illinois. The cooperative model works to provide water and wastewater services to rural, small, and disadvantaged communities.

Regionalization and regional solutions represent a critical pathway towards addressing many communities' water access needs. These approaches provide proven economies of scale relating to source water development, procurement, and workforce utilization. Moreover, [data analysis](#) indicates that larger systems have fewer health and safety violations, better management performance, lower operating and maintenance costs per customer, and lower residential prices. Texas has the opportunity to leverage IJA funds to encourage the development and deployment of regional solutions. Lastly, given the Legislature's articulated policy preference for regionalization within the Texas Water Code, new funding programs should be structured to prioritize and emphasize regional solutions.

5. Texas faces a qualified water workforce deficit.

A recent [survey of state water utilities reported in *Texas + Water*](#) found that 73% of respondents expressed concern about their ability to maintain their current or future workforce. Water utilities across Texas are facing a workforce shortage of qualified, licensed, or certified personnel to operate their systems. This is principally due to retirements, turnover, and a competitive labor market. These personnel are essential to the continued operation of water and wastewater infrastructure and compliance with state and federal health, safety, and

environmental protection requirements. The success of any state or federal investments in local or regional water infrastructure ultimately hinges on the availability of qualified personnel to operate those systems. Policy makers have two levers at their disposal to address this emerging issue. The first is the prioritization of regional solutions (discussed above) that may achieve workforce-related economies of scale. The second lever involves the establishment and creation of water workforce-specific development programs.

Recommendations

These recommendations are organized within five categories: financial strategy, planning, capacity development, support, and transparency. The recommendations here are ambitious, centered on two challenges: 1. Maximizing state leverage of IJA dollars and 2. Recalibrating state water policy to address the problems associated with deteriorating infrastructure, particularly within small, rural, and disadvantaged communities.

Category 1. Financial Strategy.

1.1. Amend the Texas Constitution to either expand an existing fund or to authorize the Texas Water Infrastructure Resilience Fund, capitalize the new or expanded fund with \$5 billion, and dedicate a sales or severance tax revenue stream for the Fund.

1.1.A. Create Texas Water Infrastructure Resilience Fund or modify an existing in the Texas Constitution to address failing or at-risk of failing water systems.

This recommendation would propose a new section within Article III, Texas Constitution establishing the Texas Water Infrastructure Resilience Fund (TWIRF). TWIRF would be a special fund in the state treasury outside of the general revenue fund. The Fund shall be administered by TWDB for the purpose of repairing or replacing aging, deteriorating water and wastewater infrastructure that is either failing or at-risk of failing, providing technical assistance outreach, and to encourage regional solutions for water and wastewater projects. The legislature may authorize TWDB to establish accounts within the Fund for the purposes of making grants, forgivable loans, or providing revolving loans for eligible water infrastructure projects. Further, TWDB would be authorized to issue bonds payable by revenues to the TWIRF. The TWIRF shall consist of funds appropriated by the legislature through general law, interest and earnings, and the proceeds of any fee or tax that is dedicated by the legislature to the Fund.

If approved by the Legislature, the constitutional amendment creating the TWIRF would be submitted to state voters for approval. Requiring that state voters approve this constitutional amendment, and making contributions to the TWIRF contingent upon voters' approval, could provide for the allocation of budget surpluses anticipated for the 88th Regular Session above those amounts authorized by the spending limit approved by the Legislative Budget Board.

1.1.B. Capitalize TWIRF with \$5 billion.

Given the significant budget surpluses anticipated for the 88th Regular Session, this recommendation would capitalize TWIRF with \$5 billion. As part of this recommendation, a portion of this capitalized amount could be set aside for investment for the purposes of

generating revenue for the Fund. An additional proportion could be set-aside for the purpose of providing revolving loans. The remaining portion could be used for the purposes of providing grants or forgivable loans to eligible projects (those that are failing or at risk of failing) or for supporting agency operations associated with water access needs assessments of project financing.

1.1.C. Dedicate certain sales or severance tax revenue stream surpluses to the Texas Water Infrastructure Resilience Fund.

This recommendation would establish a stable, predictable revenue stream for fixing Texas' aging, depreciating water and wastewater infrastructure and provide a consistent revenue source for TWDB. There are two options for creating a revenue stream for the TWIRF. One approach could be to allocate certain sales tax surpluses to TWIRF. Currently, [Section 7-c](#) within Article VIII dedicates the first \$2.5 billion that exceeds the first \$28 billion of annual sales tax revenue to the credit of the state highway fund for certain purposes. This approach would amend the Constitution to propose that the next \$250 million in excess annual sales tax collections be dedicated to the TWIRF. This recommendation builds on the constitutional precedent Texas voters approved for sales tax diversions for transportation needs and state parks. An alternative approach could be to allocate severance tax receipts above a designated threshold to the TWIRF.

1.2. Establish the Texas Water Infrastructure Resilience Fund for financing qualified water access needs projects.

1.2.A. Authorize TWDB's administration of TWIRF to finance qualified projects through other program funds.

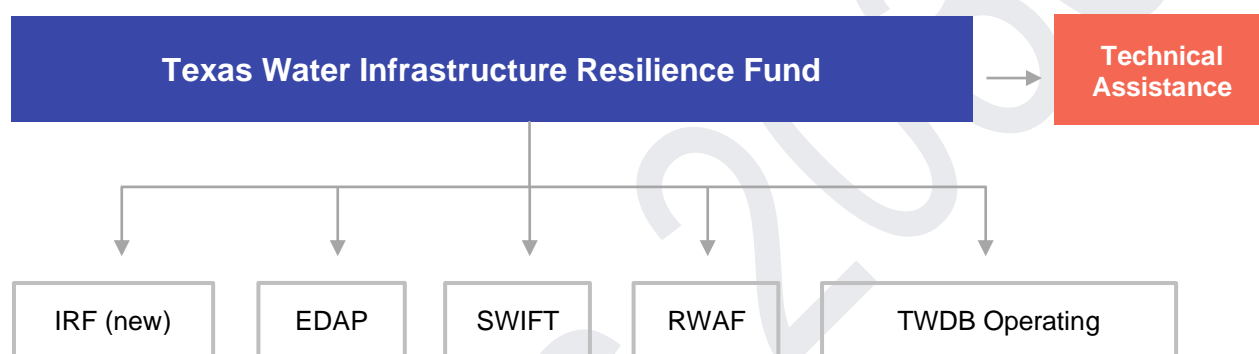
This recommendation would establish the TWIRF in Chapter 15, Water Code (possibly by reconstituting the Water Assistance Fund in Section 15.011, Water Code). The fund may be used to finance projects identified within the water access needs assessment (See Recommendation 2.1) as failing or at risk of failing. Eligible projects could include: the repair or replacement of aging, deteriorating infrastructure; improved resilience to extreme weather events; the reduction of water loss; or compliance with state and federal health, safety, and environmental protection requirements. TWIRF funds may be allocated under the Board's discretion to other program funds, including the State Water Implementation Fund for Texas, Rural Water Assistance Fund, Economically Distressed Areas Program, and the Infrastructure Rehabilitation Fund (see Recommendation 1.2.D., below). Under this recommendation, those funds allocated to the SWIFT may be only used for projects designed to curb water loss.

Further, TWIRF funds may be used for either the TWDB's provision of technical assistance services or for contracts with technical assistance providers. Predevelopment and technical

assistance funding serves a critical role in determining whether a project is ultimately successful. This is particularly true for projects serving small, rural, and disadvantaged communities. Authorizing the use of TWIRF funding for technical assistance financing or refunding would ensure the provision of needed predevelopment outreach to qualified communities.

As part of this recommendation, TWDB may use up to 49% of constitutionally dedicated revenues to the TWIRF for agency administration of Fund programs and projects, including administration of the water access needs assessment described in Recommendation 2.1. The illustration in Figure 1, below, depicts how TWIRF would function.

Figure 1. TWIRF Operating Structure



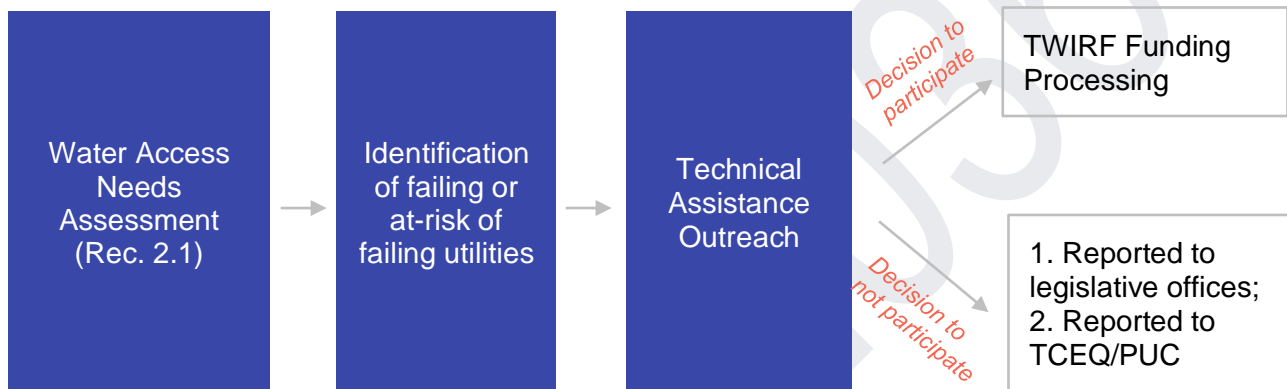
1.2.B. Require that TWDB provide technical assistance outreach to utilities identified as failing, or at risk of failing, through water access needs assessment.

TWIRF funds could be used to pay for technical assistance, provided either directly by TWDB or a contracted third party provider. As part of this recommendation, a technical assistance provider would be required to provide outreach to a water utility identified as failing, or at risk of failing, according to the most recent water access needs assessment. If a water utility declines the technical assistance outreach and elects to continue providing service as a failing or at-risk of failing system, then the Legislature may want to consider other options to hold the utility accountable. One possibility would be to require that TWDB notify state representatives and senators for the utility’s service area of the entity’s decision to decline to participate in TWIRF funding. Another option would be to authorize TWDB to inform the Texas Commission on Environmental Quality (TCEQ) and the Public Utility Commission (PUC) of the utility’s refusal to participate in the program. As part of this option, TCEQ may pend the approval of new permits or permit amendments for the water utility until the utility consents to participation in the TWIRF program or has otherwise addressed the issues associated with its failing or at risk of failing evaluation. Further, PUC may not approve any water or wastewater service rate changes or certificate of convenience and necessity amendments until the utility consents to participation

in the TWIRF program or has otherwise addressed the issues associated with its failing or at risk of failing evaluation.

The illustration, *TWIRF Project Designation Process*, below, illustrates how the proposed fund could work in coordination with the water access needs assessment described in Recommendation 2.1.

TWIRF Project Designation Process



1.2.C. Prioritize development of regional solutions through the use of TWIRF funds.

TWDB could prioritize the development of regional solutions and regionalization through the use of TWIRF funds. Technical assistance providers may use TWIRF funding to incentivize or structure regional solutions that deliver improved economies of scale relating to rate base, workforce utilization, source water diversification, or other efficiencies. Applications for TWIRF funding could be required to include an analysis of regional alternatives that assess whether the objectives of a project application could be met through a regional solution, such as consolidation with another entity, an interlocal agreement, or an other partnership. As part of this recommendation, TWDB may reject a project proposal if the Board determines that a reasonably feasible alternative regional solution is viable, cost effective, or consistent with other criteria defined by Board rule or state law.

1.2.D. Establish the Infrastructure Rehabilitation Fund as a new program fund for financing qualified infrastructure repair projects.

This recommendation would establish the Infrastructure Rehabilitation Fund (IRF) within Chapter 15, Water Code. TWDB may allocate funds from the TWIRF to the credit of the IRF.

The IRF may be used to fund projects for water utilities that are either failing or at risk of failing according to the water access needs plan.

1.2.E. Abolish unused funds within the Texas Water Code.

In the interest of making TWDB’s statute clearer and easier to understand, this recommendation would abolish specific funds within the Texas Water Code that are unused and/or perform functions that are addressed through other operating TWDB funds or programs. As part of this recommendation, the following funds would be recommended for statutory repeal:

- Plumbing Loan Fund ([Subchapter L, Chapter 15, Water Code](#)).

1.3. The Texas Legislature should appropriate, at a minimum, the maximum matching dollars for IJA programs. Exceptional Item #6 in TWDB’s Legislative Appropriations Request (LAR) seeks \$130.3 million to support debt service for the Economically Distressed Areas Program (EDAP) and matching funds to support the Clean Water and Drinking Water State Revolving Fund programs. The requested state matching funds for the SRFs are essential in order for Texas to receive its maximum allotment authorized for the CWSRF and DWSRF under IJA. The table below, *State Matching Requirements for IJA Programs*, lists the state matching requirements for each IJA program.

State Matching Requirements for IJA Programs					
Program	FY 22	FY 23	FY 24	FY 25	FY 26
CWSRF - Base	10%	10%	20%	20%	20%
CWSRF - Emerging Contaminants	No state match required.				
DWSRF - Base	10%	10%	20%	20%	20%
DWSRF - LSL replacement	No state match required.				
DWSRF - Emerging Contaminants	No state match required.				
Section 50106 Operational Sustainability of Small PWS	10% match, may be subject to EPA waiver.				

Source: [Congressional Research Service, Infrastructure Investment and Jobs Act \(IIJA\): Drinking Water and Wastewater Infrastructure](#).

The table below, *Texas DWSRF & CWSRF Matching Requirements*, identifies the matching contributions required for each federal fiscal year (October 1 - September 30).

Texas DWSRF & CWSRF Matching Requirements					
Program	FY 22	FY 23	FY 24	FY 25	FY 26
CWSRF - General	\$13,400,000	\$13,400,000	\$26,800,000	\$26,800,000	\$26,800,000
DWSRF - General	\$19,760,000	\$19,760,000	\$39,520,000	\$39,520,000	\$39,520,000

Source: Calculated from TWDB presentation from May 31, 2022 Stakeholder Group Meeting.

Approval of Exceptional Item Request #6 for the FY 24/25 General Appropriations Act is essential for Texas to receive its maximum SRF allotment in the coming biennium. It should be noted that additional matching appropriations will be needed during the 89th legislative session (2025) in order for Texas to continue to receive its IJA SRF allotment through federal fiscal year 2026.

Category 2. Planning.

2.1. Establish a water access needs assessment process within TWDB to identify utilities that are failing or at-risk of failing.

The recommendations in Category 1 (above) authorize TWDB to allocate TWIRF funds to water utilities that are failing or at risk of failing according to the water access needs assessment. This recommendation describes that assessment process. Underlying this recommendation is the need to collect, analyze, and utilize data to assess the magnitude of water access needs among Texas’ water utilities. This data driven approach will identify those utilities that are failing or at-risk of failing for the purposes of strategically deploying technical assistance and TWIRF resources.

As part of this recommendation TWDB shall perform a water access needs assessment of water and wastewater utilities. The assessment will evaluate utilities’ risk factors within the following categories: infrastructure condition; water availability; water quality; affordability; and financial, managerial, and technical (FMT) capacity. The table, *Water Access Needs Assessment Categories & Risk Factors*, lists potential risk indicators for each category.

Water Access Needs Assessment Categories & Risk Factors

Category	Examples of Associated Risk Factors
Infrastructure Condition	Known age of system; presence of lead service lines; presence of cast iron pipes older than 30 years; high rates of water loss; absence of interconnects to other systems; susceptibility to extreme weather (drought, risk, severe storm) risks.
Water Availability	Number of water sources; drought and water shortage risk; unsustainable groundwater production or MAG; bottled/hailed water reliance.
Water Quality	History of E. Coli presence; known treatment violations; number of boil water notices; number of sanitary sewer overflows; presence of emerging contaminants (PFAS/PFOA); open discharge; failing on-site septic systems.
Affordability	Median household income; high utility bills; percent of shut offs; rural service area; disadvantaged service area.
FMT Capacity	Operator certification violations; monitoring and reporting violations; absence of qualified workforce; net annual income; operating ratio (revenues/expenses).

Each risk factor would be assigned a numerical weight that will be used in a ranking system that identifies and prioritizes utilities that are failing or at-risk of failing. TWDB may consult with TCEQ and PUC in the development of category risk factors, their associated rankings, and the development of scoring thresholds for identifying failing or at risk of failing utilities. TWDB may, in consultation with TCEQ and PUC, re-evaluate the risk factors and their associated numerical weights once every two years. As part of this recommendation, TWDB could enter into a memorandum of understanding with TCEQ, PUC, and the Department of State Health Services for the open transfer and sharing of utilities’ data, including critical infrastructure data. TWDB may partner or contract with an institution of higher education for the purposes of conducting a water access needs assessment.

The water access needs assessment should be conducted on an annual basis. TWDB would not be required to assess all 10,000+ water and wastewater utilities per year. Rather, TWDB may designate specific industry segments for assessment in a given year. The table, *Hypothetical Water Access Need Assessment Schedule*, below describes a hypothetical schedule for the delivery of water access needs assessments.

Hypothetical Water Access Need Assessment Schedule

Year 1	Small systems in counties with a population of 25,000 or less.
Year 2	Medium systems on the Gulf Coast.
Year 3	Large and very large systems in counties with a population of 500,000 or more.
Year 4	Systems overlying the Ogallala Aquifer.
Year 5	Systems in counties that have experienced high levels of growth over the past decade.

TWDB shall attempt to evaluate all utilities at least once every ten years.

The water access needs assessment should list those utilities that are failing or at-risk of failing. TWDB shall notify a utility of its failing or at-risk of failing status. Notice should also be provided to TCEQ, PUC, and state legislators whose districts include the failing or at-risk of failing utility. Annual water access needs assessment shall also be posted on TWDB’s website.

This recommendation builds on previous efforts by the Texas Secretary of State’s Office and current efforts by the Office of the Attorney General to document and assess the water access needs of underserved communities, including colonias. In 2014 the Secretary of State published a report, “[Tracking the Progress of State Funded Projects that Benefit Colonias.](#)” That report included data-driven assessments of the number of colonia residents with access – or lack of access – to basic infrastructure including potable water and operational wastewater disposal systems. This report included the recommendation to the 84th Legislature (2015) to support funding to comprehensively survey the basic infrastructure services available in each colonia. In addition to the Secretary of State’s report, the Office of the Attorney General [maintains a database](#) documenting known colonias and their associated water and wastewater deficiencies. The water access needs assessment proposed here builds on this data-driven approach for evaluating the condition of underserved communities’ infrastructure needs.

2.2. Create a Texas Water Technical Assistance Advisory Consortium. This recommendation would establish a consortium, by statute, to develop and expand the state’s technical assistance capacity, particularly capacity made available to small, rural, or disadvantaged communities. The consortium would be administered by TWDB. Consortium members would include representatives from TWDB, TCEQ, USDA, TRWA, counties (with at least one representative from a county with a population of 100,000 or less), technical assistance providers, and corporate and philanthropic interests. The consortium shall meet at least once a year, and shall assess on-going technical assistance development efforts, progress made towards expanding the state’s technical assistance corps, and make recommendations to improve or

enhance technical assistance delivery. The consortium shall be eligible for Sunset review at the same time as TWDB.

Category 3. Capacity Development.

3.1. Authorize creation of regional water service authorities. This recommendation would require the creation of a new chapter or subchapter in the Texas Water Code authorizing water utilities to cooperate with other water utilities via an interlocal agreement to provide services and/or water, wastewater, or flood control and mitigation infrastructure development, maintenance, or operation. Utilities would be authorized to create a separate legal entity (hereafter, authority) through an interlocal agreement for the purposes of acquiring, owning, constructing, improving, operating, or managing water, wastewater, or flood control facilities, including, but not limited to, water supply, water reuse, desalination, aquifer storage and recovery, flood control, and drinking or wastewater treatment facilities. An authority would not be allowed to provide service within the certificated area of another utility without the consent of that utility. This recommendation would authorize, but not require, regional approaches. Further, the proposed chapter could include a description of a range of regional solution options.

This chapter could be modeled after the Florida Interlocal Cooperation Act (see: [Title XI, Chapter 163, Florida Statutes](#)). While the Texas Water Code already includes [a chapter for regional water districts](#), that chapter is bracketed to Harris County and adjoining counties. (See Environmental Finance Advisory Board report, [Funding Strategies to Promote System Regionalization](#), for Florida and other state examples.)

3.2. Create a state technical assistance provider incubator. Texas needs to expand its technical assistance provider corps. One innovative approach towards meeting this objective is to establish a technical assistance provider incubator that develops both organizations and personnel for the purposes of providing technical assistance outreach. Ideally, the incubator would be a collaborative effort between state and federal agencies (TWDB, TCEQ, USDA, EPA), existing technical assistance providers, an institution of higher education, and philanthropic and/or corporate interests. The incubator could train organizations and personnel on the statutory and administrative requirements for each water-related financial assistance program, methods for identifying and classifying communities' water access needs, methods for community outreach and engagement, and, among other training objectives, developing projects including regional, nature-based, or sustainable solutions. This incubator could be Texas-based, or serve a region that includes Texas. (One example of an incubator-like organization working in another state is [The Water Tower](#) project in Georgia.)

3.3. Establish a model for TWDB and TCEQ procurement of technical assistance provider services. This recommendation would authorize TWDB and TCEQ to contract with technical assistance providers for the purpose of providing technical outreach services on behalf of the agency. As part of this procurement, each agency shall prioritize the selection of providers that: engage in outreach activities to diverse areas of the state, including areas in counties with a population of 100,000 or less; are proficient in state and federal programs for providing financial assistance for water, wastewater, and flood control projects; capable of reconciling water supply assumptions with available water supplies subject to sustainable use; capable of guiding entities through the development of essential financial assistance application information, including audited financials, cash flow modeling, and rate impact analyses; capable of structuring and proposing regional solutions for water and wastewater systems; capable of recommending projects or system designs that are resilient to extreme weather; capable of advising water utilities on upgraded needed to improve information security and resilience to cyberattacks; and capable of advising water utilities on nature-based and/or OneWater solutions. This recommendation would assist with the state’s goal of increasing external outreach about the IJA’s funding opportunities, as well as those available through other state-administered financial assistance programs. Moreover, this recommendation could assist TWDB with implementation of [Section 50210 of IJA](#) which authorizes states to allocate 2% of CWSRF funds to provide technical assistance to small, rural, and tribal publicly owned treatment works.

3.4. Broaden definition of regional solutions in statute. [Current statute](#) defines regionalization as the consolidation of water facilities. This definition excludes other types of regional solutions that may work to deliver needed economies of scale. Texas’ legal concept of regionalization should be expanded to include a broader array of regional solutions, including informal cooperation, contractual assistance, shared governance, ownership transfer, or a combination of these elements. Expanding the concept of regional solutions to include these other activities would enhance capacity to deliver IJA funded projects to small, rural, and disadvantaged communities. This is a prerequisite for the following recommendation to establish incentives for regional solutions.

3.5. Establish incentives for regional solutions within SRFs. This recommendation would have TWDB prioritize and incentivize regionalization through more intentional, targeted, and favorable funding terms. As suggested within the [Rural Community Assistance Partnership May 2021 research report](#), this could include increasing grant funding, increasing grant/loan ratios, reducing match requirements, capping interest rates, and/or increasing the availability of principal forgiveness. Further, and as recommended by the [Environmental Financial Advisory Board’s April 2019 report](#), the SRF application process could be amended to require the submissions of an Analysis of Regional Alternatives (ARA) new or expanded water facilities. The ARA should address whether the objectives of an applicant’s project could be met through a

partnership or contract to use existing capacity at another facility as well as restructuring ownership and operational responsibility. This analysis should include a triple bottom line benefit analysis to compare all aspects of the alternatives considered. All ARAs should be certified as true, complete and accurate by a licensed professional engineer.

Category 4. Support.

4.1. Update Texas’ “Safe Harbor” provision to protect regional systems that absorb distressed water utilities from certain regulatory penalties for a reasonable period of time.

The liability associated with incorporating a noncompliant water utility within a regional system discourages efforts to develop regional solutions. Water utilities need a regulatory incentive to incorporate noncompliant entities into a regional system by not being penalized for the absorbed system’s noncompliance liabilities. Although a limited safe harbor provision exists within [§7.0026, Water Code](#), this provision applies only to services operated by or for a municipality or county being integrated into a regional water supply. In order to broaden this safe harbor provision, it should apply to *all* retail utilities providing water or wastewater service that are being integrated into a regional water supply. This recommendation should also apply to regional water service authorities described in Recommendation 3.1. As part of this recommendation, TCEQ shall adopt rules implementing this change in statute no later than December 1, 2023. (See Recommendation 2 from Environmental Financial Advisory Board report, [Financing Strategies to Promote System Regionalization](#))

4.2. Encourage 100% grants or loan forgiveness from CWSRF and DWSRF for qualified water utilities. As a general proposition, it is valuable for communities to have “skin in the game” by having at least a portion of their capital budget provided through loans. Nonetheless, there are some communities for whom any loan creates a challenge until they can get to some level of economic health. IJIA requires that 49% of the funds provided through the DWSRF General Supplemental Funding and Lead Service Line Replacement Funding be provided as grants or forgivable loans to disadvantaged communities. At least 25% of DWSRF emerging contaminants funding must be provided as grants or forgivable loans to disadvantaged communities or small water systems. Further, 49% of CWSRF General Supplemental Funding must be provided as grants or forgivable loans to qualified entities. Given the broad authorization for providing grants or forgivable loans, TWDB should be encouraged to provide qualified entities or water utilities with grants or forgivable loans of up to 100% of the project amount. This level of subsidy is needed to target and deploy IJIA funds to small, rural, and disadvantaged communities, many of which may lack the financial wherewithal to pay for debt service. Further, increased subsidy levels, including 100% grants or forgivable loans, should be used to incentivize preferred outcomes, including regional solutions and infrastructure resilience.

4.3. Create “Texas Delivers Water” branding program for all IJA and TWIRF funded water projects. This recommendation encourages entities receiving IJA or TWIRF funds to address their water needs to post a large, publicly visible sign by each project site. The sign should include: the “Texas Delivers Water” brand; a description of the project; a brief, plain language description of the project benefits (e.g. “This project will replace 60 year old leaking pipes.” or “This project will remove contaminants from our drinking water.” or “This project improves our water resources for drought.”); and a disclosure that the project was funded by TWDB. In addition, the sign should disclose whether the project received technical assistance from a specific technical assistance provider. As part of this recommendation, TWDB should develop branding materials for “Texas Delivers Water” projects.

This recommendation borrows a page from the American Recovery and Reinvestment Act (ARRA) of 2009. Posting publicly-facing signs advertising that specific projects are funded by IJA could improve and enhance the state’s outreach to small, rural, and disadvantaged communities, particularly those that are unaware of financial assistance opportunities and the benefits that they may provide.

4.4. Establish water workforce development programs. One of the critical issues facing many small, rural, and disadvantaged water systems is the lack of qualified personnel to operate them. This issue is not limited to smaller or disadvantaged systems: larger water systems, including those serving major metropolitan areas, face a near-term workforce crisis. If Texas is to fund the development, repair, or rehabilitation of water and wastewater systems using IJA funds, then the state needs to develop a workforce capable and qualified to operate those systems. Failing to develop a qualified water workforce invites system mismanagement resulting in continued, or future, noncompliance with state and federal health, safety, and environmental protection laws. As part of this recommendation, the state may need to require that if qualified staff is a threshold requirement for project development or operation — i.e. critical for program success — then this should prompt broader discussion about regional solutions as a way to leverage economies of scale through a regional provider.

Category 5. Transparency.

5.1. Develop a Texas IJA implementation dashboard. Measurements of success in implementing IJA will both inform and guide Texas’ continued policy development regarding water access needs planning. This recommendation would require that TWDB make specific information regarding IJA implementation benchmarks available on its website. Specifically, TWDB should develop an IJA Transparency Portal that describes, on a program year and aggregate basis:

- The total amount and total proportion of IJJA SRF funding allocated to small, rural, and disadvantaged communities;
- The total number of funded projects associated with regional solutions.
- The total number of projects funded that include project designs associated with resilience to extreme weather events.
- The total number of projects funded that include resilience to cyber attacks.
- The total number of projects that may be classified as OneWater or nature-based solutions.
- The total number of projects that receive technical assistance outreach and support from TWDB, a TWDB contractor, or a qualified third party.

As part of this recommendation, TWDB should develop an interactive map on its website delineating the location of each project funded using IJJA funds.

Category 6. Related Issues/Other Ideas Bucket.

Recommendation 6.1. Address use of PFAS/PFOA for fire fighting purposes. As part of this recommendation, communities that receive CWRSF or DWSRF program funds for emerging contaminant (PFAS/PFOA) removal and mitigation should adopt policies limiting their fire department’s use of fire fighting foams that include PFAS. This recommendation would ensure that local fire fighting efforts don’t aggravate the emerging contaminant issues that the allocated IJJA funds were intended to address. Further, the Legislature should require fire departments that use fire fighting foams for qualifying incidents ([Class B fires](#) that include oil, jet fuel, and gasoline) report that use to TCEQ. This change would allow the state to develop a list of known locations where PFAS has been disbursed and may present a contaminant threat to the local watershed. The list developed by TCEQ should be shared with TWDB.